

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

- 1-5. (Canceled)
6. (Original) A method of detecting an endpoint of a plasma based semiconductor fabrication process, the method comprising:  
    providing an endpoint detector;  
    isolating the endpoint detector from exposure to an exhaust of a plasma based semiconductor fabrication process during an initial stage of the process; and  
    exposing the endpoint detector to exhaust from the process during a later stage of the process.
7. (Canceled)
8. (Original) The method of claim 6 wherein the plasma based semiconductor fabrication process is one of a plasma enhanced chemical vapor deposition (PECVD) process and a high density plasma chemical vapor deposition (HDP-CVD) process.
9. (Original) The method of claim 6 wherein the plasma based semiconductor fabrication process is a plasma etching process.
10. (Original) The method of claim 6 wherein isolation of the endpoint detector reduces unwanted deposition of material on exposed surfaces of the endpoint detector, thereby improving a stability of an optical signal produced from an electrical discharge between a cathode and an anode of the endpoint detector.
11. (Original) The method of claim 6 wherein isolation of the endpoint detector reduces unwanted deposition of material on exposed surfaces of the endpoint detector, thereby improving a stability of an RF power signal of a plasma generated in the endpoint detector.

12. (Original) The method of claim 6 wherein the endpoint detector is exposed after a predetermined elapsed time of the process corresponding to an endpoint qualifier.

13-16. (Canceled)

17. (New) The method of claim 6 wherein the endpoint detector is exposed to the exhaust by an isolation valve controlled by a controller, the controller programmed to open the isolation valve after an initial phase of the plasma based process.